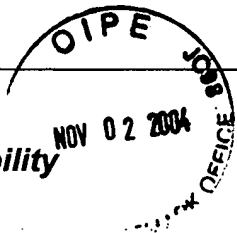


Notice of Allowability



Application No.	Applicant(s)	
10/039,725	CLEWIS ET AL.	
Examiner	Art Unit	
Mohammad Ali	2177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1: ☒ This communication is responsive to July 29, 2004.
- 2: ☒ The allowed claim(s) is/are 1-20.
- 3: ☒ The drawings filed on 09 July 2004 and 26 March 2002 are accepted by the Examiner.
- 4: ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

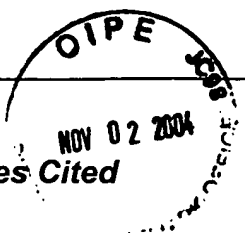
- 5: ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 6: ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 7: ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1: <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5: <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2: <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6: <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3: <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____. | 7: <input type="checkbox"/> Examiner's Amendment/Comment |
| 4: <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8: <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9: <input type="checkbox"/> Other _____. |

Mohammad Ali
 Mohammad Ali
 Examiner
 Art Unit: 2177

Notice of References Cited



Application/Control No.

10/039,725

Applicant(s)/Patent Under

Reexamination
CLEWIS ET AL.

Examiner

Mohammad Ali

Art Unit

2177

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)			
*	U	Li et al., "Object recognition based on graph matching implemented by a hopfield-style neural network", Dept. of Electr. Eng., Worcester Polytech. Inst., MA, USA, June 18-22, 1989, PP. 287-290 Vol. 2.			
*	V	LUO et al., "Structural graph matching using the EM algorithm and singular value decomposition", Dept. of Comp. Sci., York Univ., UK, IEEE, Oct. 2001, PP. 1120-1136.			
	W				
	X				

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

DETAILED ACTION

1. This communication is in response for July 29, 2004.

After a search and a thorough examination of the present application and in light of the prior art made of records, claims 1-20 are allowed.

Reason for Allowance

2. The prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claim 1 as argued by the applicant's. More specifically, the prior art of records fails to fairly teach the steps of

wherein a node relationship graph (NRG), wherein each node in the NRG corresponds to at least one node in the data graph, and wherein each node in the NRG includes a computed set of valid sub-node patterns; a pattern testing system that determines if the set of target sub-node patterns for a node pattern matches the set of valid sub-node patterns for a corresponding NRG node when a node is encountered in the data graph.

The prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claim 9 as argued by the applicant's. More specifically, the prior art of records fails to fairly teach the steps of

wherein a system for generating a set of target sub-node patterns for each inputted node pattern; a pattern testing system that determines if the target sub-

Art Unit: 2177

node patterns for a node pattern match the valid sub-node patterns for a corresponding node in the NRG when a node is encountered in the data graph.

The prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claim 14. More specifically, the prior art of records fails to fairly teach the steps of

wherein computing a set of target sub-node patterns for each inputted node pattern; testing to determine if the target sub-node patterns for a node pattern matches the valid sub-node patterns for a corresponding NRG node when a node is encountered in the graph.

The prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claim 16 as argued by the applicant's. More specifically, the prior art of records fails to fairly teach the steps of

wherein means for generating a set of target sub-node patterns for each inputted node pattern; means for determining if the target sub-node patterns for a node pattern match the valid sub-node patterns for a corresponding node in the NRG when a node is encountered in the data graph.

The dependent claims, being definite, further limiting, and fully enabled by the specification and are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

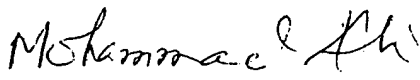
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (703) 605-4356. The examiner can normally be reached on Monday to Thursday from 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for any communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

MA

September 4 , 2004


Mohammad Ali

Patent Examiner

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